

DESCRIPTIONS OF NEW SPECIES OF ORTHOPTERA COLLECTED IN
NEVADA, UTAH, AND ARIZONA, BY THE EXPEDITION
UNDER LIEUT. GEO. M. WHEELER.

BY CYRUS THOMAS, PH.D.

WASHINGTON, D. C., May 9th, 1873.

LIEUT. GEO. M. WHEELER, *Dear Sir*: Among the *Orthoptera* collected by your expedition in Nevada, Utah, and Arizona, I find several new and interesting species, and especially the two following, of which I send the descriptions, that you may have them published at as early a day as possible.

Yours very respectfully,

(Signed)

CYRUS THOMAS.

ACRIDIDÆ.

ÆDIPODINI.

PEDIOSCERTETES, gen. nov.

Back of the head ascending; vertex rises in front of the eyes in the form of a triangular pyramid; frontal costa distinct above the ocellus, fading below; face sub-oblique. Pronotum regularly expanding posteriorly; sub-tricarinate, the front lobes being rounded, so that the lateral carinæ are indistinct; the median carina wanting, or but a minute line; front margin truncate, hind margin rounded; the three transverse impressions distinct, but not profound. Elytra and wings present. Posterior femora slender; first joint of the posterior tarsi as long as the other two. Metasternum broad; the prosternum narrow, unspined, and without any tubercle. Seen from above tapers considerably from the metathorax to the head, which is quite narrow, but elongate perpendicularly.

This resembles in general appearance *Acrolophitus*, to which it is closely allied, but from which it differs in wanting the crest on the pronotum, and in having the posterior margin of the pronotum rounded.

P. NEVADENSIS, sp. nov.

The tip of the vertex separated from the portion between the eyes by a curved sulcus, which runs from the upper canthus of one eye to that of the other; this portion of the vertex is obliquely ascending and triangular; there are no median or lateral foveolæ. Frontal costa prominent and narrow between the eyes,

and slightly sulcate; the portion below the ocellus indistinct, a little broader than that above, expanding below and slightly sulcate; lateral carinæ indistinct, parallel; face somewhat oblique, narrow. Eyes oblong, ovate, oblique. Antennæ extending about one-fourth their length beyond the pronotum, robust, very slightly depressed, and apparently enlarged toward the apex. Front lobes of the pronotum rounded, sub-cylindrical; lateral carinæ obsolete on the front lobes, obtuse on the posterior lobe; median earina is but an indistinct line; three transverse incisions distinct, but not profound, the posterior one situated a little behind the middle; the posterior border is regularly rounded, nearly semi-circular; the posterior lateral margin curves inward but makes no angle; the posterior lobe is distinctly broader than the head.

Elytra of moderate width; wings rather narrow, both extend slightly beyond the abdomen. The abdomen is enlarged and deep at the base; the valves of the ovipositor slender and acute. The posterior femora are quite slender, being but slightly enlarged at base; posterior tibiæ cylindrical. The body and legs more or less covered by small hairs.

Color (after immersion in alcohol).—Dull greenish-yellow, showing the original color to have been green, probably light pea-green, which is almost entirely uniform on the head, thorax, elytra, and legs, without spots. The antennæ are dusky at the tips. There is a slight rufous tinge on the posterior lobe of the pronotum, and base of the elytra; the apical portion of the latter is translucent; wings pale yellow at base—probably greenish-yellow in the living individual—with a moderately broad fuscous band across the disk, apex transparent with dark nerves. Spines of the posterior tibiæ yellowish, very slightly or not at all tipped with black.

Dimensions.—♀ Length 1.25 in.; elytra .80 in.; posterior femora .60 in.; posterior tibiæ .65 in.; pronotum .25 in.

ACRIDINI.

ACRIDIUM.

A. SUOSHONE, sp. nov.

Large size; color, green without a dorsal stripe.

Female. Vertex nearly horizontal, distinctly hexagonal, suddenly and angularly expanding in front of the eyes, flat. Frontal costa prominent, sides parallel, sulcate, from the ocellus down-

ward, above this somewhat gibbous and punctured; lateral carinae very prominent, parallel. Pronotum slightly expanding posteriorly; coarsely and reticulately punctured; median carina distinct, severed by the three transverse incisions. Elytra and wings passing the abdomen. Cerci very short, broad at base, narrowed, and rounded at the tip. Posterior femora much enlarged at the base; posterior tibiae considerably enlarged at the apex. Prosternal spine robust, cylindrical, and nearly straight. Pectus punctured.

Color.—Dark green. Ocelli transparent amber; eyes brown; cheeks yellowish with a dark green stripe extending downward from the eyes. The pronotum has some paler spots on the sides, and sometimes the posterior lobe is tinged with brown. Elytra of a uniform green, semi-transparent toward the apex, and sometimes faintly tinged with brown; wings hyaline, nerves and nervules dark brown. Posterior femora greenish above and below, rays of the disk alternately white and green, the white rays being the flat interspaces of the chevron; internal face greenish-yellow. Posterior tibiae bright vermilion, the under surface being striped with yellow; spines yellow at base, tipped with black. Venter and pectus dark green, sometimes varied with dark brown.

Dimensions.—Length 2 to 2.5 in.; elytra 1.7 to 2. in.; posterior femora 1.25 in.; posterior tibiae 1.2 in.

This fine species is very closely allied to *A. emarginatum*, Uhler, but differs from it in the following particulars. It has no dorsal stripe; the elytra are green or greenish instead of brownish-red; the hind femora do not have the black points on the upper margin of the disk; it does not have the black dots on the ventral segments; it is also a larger and more robust species, being one of the largest of this genus found in the United States. I should also state that the cerci of the male, though broad as usual with the section of the genus to which this belongs, instead of extending horizontally along the sides, are curved over the apex; and the sub-anal plate is more than usually elongate, with the apical notch slightly rounded.

The collection was made chiefly by Dr. Yarrow, who informs me that the specimens are mostly from southeast Nevada and southwest Utah. There are some other interesting and new species in the collection, which will be described in Lieut. Wheeler's report of his explorations.